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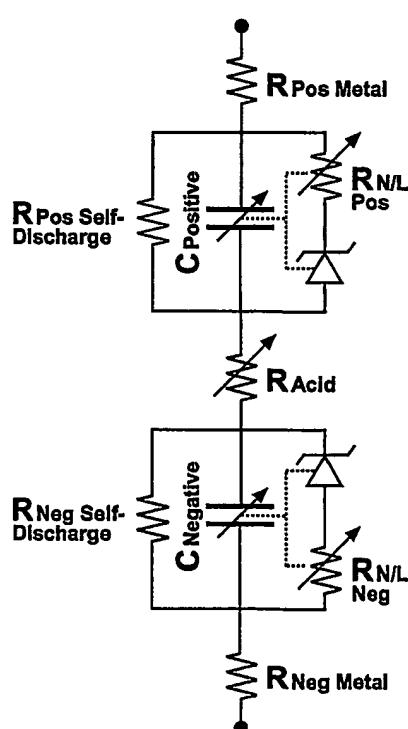
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- (71) Applicant (*for all designated States except US*): IVEN-SYS ENERGY SYSTEMS (NZ) LIMITED [NZ/NZ]; 39 Princess Street, Christchurch, 8004 (NZ).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): ANBUKY, Adrian, H [NZ/NZ]; 23 Heath Street, Christchurch, 8005 (NZ). HUNTER, Phillip [NZ/NZ]; C/o Invensys Energy Systems, 39 Princess Street, Christchurch, 8004 (NZ).
- (74) Agent: BALDWINS; PO Box 5999, Wellesley Street, Auckland, 1001 (NZ).
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(54) Title: BATTERY FLOAT MANAGEMENT



(57) Abstract: The invention relates to a new VRLA battery float model. The model covers the steady state and transient float charge behaviour of both positive and negative electrodes. Backup analysis verifies the internal polarisation distribution for a conventional 2V-cell polarisation behaviours can be identified without the need for a physical reference electrode. The estimated individual electrode polarisation allows early detection of common failure modes like negative plate discharge as well as a reference for float voltage optimisation. Furthermore, the positive polarisation relating to minimum grid corrosion may be correlated with the occurrence of the peak of a "Tafel" like resistance used by the model. The model encourages utilisation of low signal perturbation for testing a cell's state of health and state of charge conditions while at float.

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